Zero is a Valid Number

Zero is a valid number. This is one concept which mathematicians have a difficult time understanding. This is why they do not believe there can be more than one zero in any equation.

Understanding that zero is a valid number allows one to understand the concept of zero and the concept of infinity. Zero is the smallest number, it has an infinite number of decimal places and infinity is the largest number; its size goes on forever.

When we divide a number by another number, the larger the number we divide by, the smaller the result is. The rule is (If the dividend remains constant, the quotient is inversely proportional to the divisor). The larger the divisor, the smaller the quotient. For example, $15 \div 3 = 5$ and $15 \div 5 = 3$. As we increase the divisor from 3 to 5 the quotient decreases from 5 to 3.

Going by this rule, if we divide the number one (1) by the largest number, which is infinity (∞), the quotient (result) is the smallest number, which is zero (0). Inversely, if we divide the number one (1) by the smallest number, which is zero (0), the result (quotient) is the largest number, which is infinity (∞).

What mathematicians fail to understand is, there can be more than one zero in an equation. Even if they agree that $1 \div (\infty) = 0$, they will not agree that $5 \div (\infty) = 5(0)$, because they state that zero is zero and there can be no more than one zero in an equation. Try to envision 5 parallel lines running side by side forever into space. It is possible to have such lines. They are all infinite lines. Try to envision 5 specks which are so small they disappear into nothing. It is possible to have such specks side by side which are infinitely small. Their size is zero and so we have five zeros in this example.

Mathematicians do agree that the equation $5(\pi)$ cannot be simplified because the number associated with Pi (π) goes to an infinite number of decimal points and cannot be written out. The same is true with the number zero (0) which is infinitely small and cannot be written out as a string of numbers. Like Pi, zero also goes to an infinite number of decimal places. Therefore 5(0) cannot be simplified, it must remain as it is written.

We conclude that we cannot simplify $5 \div (\infty) = 5(0)$. This equation must remain as is and cannot be simplified to $5 \div (\infty) = 0$ as some mathematicians may tell us. Rather than trying to understand this concept, mathematicians will state that any number divided by zero is undefined. I argue that it is defined. The proper equations are, $1 \div 0 = (\infty)$, $5 \div 0 = 5(\infty)$, $1 \div (\infty) = 0$, and $5 \div (\infty) = 5(0)$. It is as simple as that.